Amendments to the Specification

Please replace the paragraph beginning at page 7, line 9 with the following paragraph:

Alternatively, the ETM can be detected, not necessarily via electron transfer through nucleic acid, but rather can be directly detected on an electrode comprising a SAM; that is, the electrons from the ETMs need not travel through the stacked π orbitals in order to generate a signal. As above, in this embodiment, the detection electrode preferably comprises a self-assembled monolayer (SAM) that serves to shield the electrode from redox-active species in the sample. In this embodiment, the presence of ETMs on the surface of a SAM, that has been formulated to comprise slight "defects" (sometimes referred to herein as "microconduits", "nanoconduits" or "electroconduits") can be directly detected. This basic idea is termed "mechanism-2" herein. Essentially, the electroconduits allow particular ETMs access to the surface. Upon binding of a target analyte to a binding species on the surface, a recruitment linker or label probe comprising at least one ETM is brought to the surface, and detection of the ETM can proceed. Thus, the role of the target analyte and binding species is to provide specificity for a recruitment of ETMs to the surface, where they can be detected using the electrode. The role of the asymmetric monolayer species comprising the defects is to allow contact of the ETM with the electronic surface of the electrode, while still providing the benefits of shielding the electrode from solution components and reducing the amount of non-specific binding to the electrodes. See, for example, WO98/20162; PCT US98/12430; PCT US98/12082; PCT US99/01705; PCT/US99/21683; PCT/US99/10104; PCT/US99/01703; PCT/US00/20476; PCT/US00/31233; U.S. Patent Nos. 5,620,850; 6,197,515; 6,013,459; 6,013,170; ~~and~~ 6,065,573; and ~~U.S.S.N.s 09/660,374~~ 6,495,323; and, U.S.S.N. 09/135,183 and references cited therein.